**Year 7 Science: Introduction to Biology**

**Living organisms and their environments.**

Outcome after this unit of work: “Students explain the relationships, past and present, in living and non-living systems, in particular ecosystems, and human impact on these systems. They analyse what is needed for living things to survive, thrive or adapt, now and in the future. They explain how the observed characteristics of living things are used to establish a classification system.”

**Essential Question: What is Life?**

**How do we determine if something is alive?**

**What do living organisms require to stay alive?**

**How and why do we classify living things?**

**What are living things made of?**

1. Choose an Australian animal that you have not studied before – preferably a rare or threatened species. You can find a list here: DSE Threatened species Fact sheets: <http://www.dse.vic.gov.au/DSE/nrenpa.nsf/FID/-39757F7DC0240D404A256808007D8493?OpenDocument>
2. Research your chosen organism using the following headings:

* Description including **structural, functional and behavioural** characteristics.
* Classification (including scientific name)
* Diet
* Habitat
* Threats (including predators, competitors and diseases.)

1. Has the population of this species declined since European colonisation? If so, what has caused this decline in numbers?
2. You are to present your research in one of the following ways:

* A short video documentary, in the David Attenborough style.
* A report written as though you are Charles Darwin, describing this species for the first time, to send back to England in the 1850’s.]
* A poster or PowerPoint presentation.

1. Whichever method of presentation you choose, make sure you answer all the questions, include bold headings, pictures of your animal and a page of your References – where you have obtained all your information.

Here are some good sites to use:

The Gould League: <http://www.gould.edu.au/>

Zoos Victoria: <http://www.zoo.org.au/Learning/Programs>

CSIRO Animals Links: <http://www.csiro.au/resources/AnimalsWeblinks.html>

Australian Fauna: <http://www.australianfauna.com/>

**Rubric for Assessment of your Animal Poster or PowerPoint presentation.**

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| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | 1 | 2 | 3 | 4 |  | | **Headings** | No clear heading or sub-headings. | Some sub-headings but presentation is disorganised. | Good heading and some sub-headings. | Presentation has a bold and clear heading and well organised sub-headings. | \_\_\_\_ | | **Presentation** | Text is too small or difficult to read. No images present. | Text is adequate and some images used. | Text is clear and legible; some good images are used. | Well placed and easy to read text with excellent images that support text. | \_\_\_\_ | | **Information** | Inaccurate, incomplete or unclear information. | 2-3 accurate facts about your animal. | Very good information with 4-5 accurate facts about your animal. | Excellent information, with at least six accurate facts about your animal. | \_\_\_\_ | | **Knowledge and understanding of species requirements** | Student was unable to answer any questions about animal requirements. | Student answered some questions but was unable to provide accurate information about animal requirements. | Student was able to answer questions showing an adequate understanding of animal requirements. | Student was able to answer questions showing a very good understanding of animal requirements. | \_\_\_\_ | | **Colour and background design** | No colour or background OR colour and background that obscures text. | Some colour and background design, but distracts viewer from text. | Colour and background design fails to enhance the presentation. | Colour and background design is relevant and enhances presentation. | \_\_\_\_ | | **References** | Information is "cut and paste" with no references listed. | Information is largely copied with one or two references listed. | Mostly in the student's own words with two or three references listed. | Excellent information in the student's own words with at least four references used. |  | |  |  |  |  | **Total---->** | \_\_\_\_ | |